(5) If rigid, must be designed to facilitate securing the inflatable liferaft to a vessel to permit quick release for manual launching;

(6) If constructed of fibrous-glass-reinforced plastic, must be provided with a means to prevent abrasion of the liferaft fabric, such as by using a gel-coated interior finish of the container, enclosing the liferaft in an envelope of plastic film, or equivalent means; and

(7) Except as provided in paragraph (o)(4) of this section, may be of fabric construction. Each container of fabric construction must be made of coated cloth, include carrying handles and drain holes, and be adaptable to stowage and expeditious removal from lockers and deck-mounted enclosures adjacent to liferaft-launching stations. The weight of a liferaft in a fabric container including its container and equipment may not exceed 100 kg (220 lb).

[CGD 85–205, 62 FR 25547, May 9, 1997, as amended by USCG–1998–4442, 63 FR 52192, Sept. 30, 1998]

§ 160.151–17 Additional requirements for design and performance of SOLAS A and SOLAS B inflatable liferafts.

To satisfy the requirements of the indicated regulations of SOLAS, each SOLAS A and SOLAS B inflatable liferaft must be manufactured in accordance with §§ 160.151–7 and 160.151–15, and must comply with the following additional requirements:

(a) *Stability (Regulation III/39.5.1).* (1) Each liferaft with a capacity of more than 8 persons must have a waterplane of circular or elliptical shape. A hexagonal, octagonal, or similar outline approximating a circular or elliptical shape is acceptable.

(2) Each liferaft manufactured under this subpart must have water-containing stability appendages on its underside to resist capsizing from wind and waves. These appendages must meet the following requirements:

(i) The total volume of the appendages must not be less than 220 liters (7.77 ft^3) for liferafts approved to accommodate up to 10 persons. The volume of an appendage is calculated using the bottom of the lowest opening in an appendage as the height of the appendage, and by deducting the volume of any objects inside the appendage. No opening designed to close as water is forced out of an appendage is an opening for the purpose of this calculation.

(ii) The total volume of the appendages for liferafts approved to accommodate more than 10 persons must be not less than $20 \times N$ liters ($0.706 \times N$ ft^3), where N = the number of persons for which the liferaft is approved.

(iii) The appendages must be securely attached and evenly distributed around the periphery of the exterior bottom of the liferaft. They may be omitted at the locations of inflation cylinders.

(iv) The appendages must consist of at least two separate parts so that damage to one part will permit at least half of the required total volume to remain intact.

(v) Openings in or between the appendages must be provided to limit the formation of air pockets under the inflatable liferaft.

(vi) The appendages must be designed to deploy underwater when the liferaft inflates, and to fill to at least 60 percent of their capacity within 25 seconds of deployment. If weights are used for this purpose, they must be of corrosion-resistant material.

(vii) The primary color of the appendages must be vivid reddish orange (color number 34 of NBS Special Publication 440), or a fluorescent color of a similar hue.

(b) *Boarding ramp (Regulation III/39.4.1).* The boarding ramp must have sufficient size and buoyancy to support one person weighing 100 kg (220 lb), sitting or kneeling and not holding onto any other part of the liferaft.

(c) *Marking (Regulation III/39.8).* Means must be provided for identifying the liferaft with the name and port of registry of the ship to which it is to be fitted, so that the identification can be changed without opening the liferaft container.

[CGD 85–205, 62 FR 25547, May 9, 1997, as amended by USCG–1998–4442, 63 FR 52192, Sept. 30, 1998]